



Photonics Society of Chinese-Americans

Issue 0056: August 1, 2004

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Published on Websites: www.psc-a.org & www.psc-sc.org & www.eoa-psc.org

Content

2004 Elected PSC Officers	Board of Directors	Page 2
President's Message	Owen Wu	Page 3
PSC-EOA June Seminar	Yalan Mao	Page 4
PSC-EOA July Seminar	Yalan Mao	Page 5
PSC-EOA August Seminar	Yalan Mao	Page 6
OPTO Taiwan 2005	Pamela Hsiao	Page 7
NCTU Recruiting	Ci-Ling Pan	Page 8

President's Message

Dear Fellow PSC Members and Colleagues,

Greetings to you! I trust you had a wonderful summer, but it seems going by too fast

During this summer, a few of PSC founding members and former officers met with PSC Southern California Chapter officers to discuss future directions of PSC and election of new officers for 2005. I would like to acknowledge the following people for attending these meetings. They are Shikay Yao, HK Liu, Lin Chao, Yang Yang, Janice Shen, Norman Kwong, Allen Fan, Daniel Shih, Charles Wu and Jane Xiao. Let me share with you the outcome of these meetings.

Many of us are thinking about the tech trends in the 21st century, we all agree that almost in every area of science and technology, we all feeling a huge force coming from China. It is now the world's technology manufacturer of choice. Each year China produces as many engineers and scientists as the United States does and while its numbers are going up, America's are going down. China is pouring the equivalent of tens of billions of dollars into education and R&D facilities for science and medicine, while R& D spending in the US has been stagnant. For the tech industry, it's China - not Europe, or Japan or other Asian countries - that will soon be its main rival. The implications are profound. They are no longer content to cheaply make other people's products. China wants to be a global standards setter. In recent months it has moved to define its own standards for office software, operating systems, mobile phones, wireless computing, internet protocols, DVD players, video compression, RFID and other important technologies.

Because of this trend, PSC will establish two committees to focus and get involved in the standard settings. One is in the LED arena (led by Allen Fan, President of DULED) and the other is in the Telecom/Datacom arena (led by Norman Kwong, CTO of Archcom). In addition, we all felt that PSC needs to be rejuvenated after the tech bubble. We need to recall old PSC members to return as well as to recruit new members and officers. It is decided that there will be a new election in October for PSC officers for 2005-2006.

We plan to organize various dinner meetings for PSC members in the following major conferences and need local volunteers for each of the following major events.

1. October 10-14 OSA Annual Meeting 2004, Rochester, N.Y
2. November 8-12 SPIE Photonics Asia 2004, Beijing
3. January 22-27 Photonics West 2005, San Jose, CA
4. March 6-11 OFC/NFOOEC 2005, Anaheim, CA
5. CLEOS May 22-27, 2005, Baltimore, Maryland

I sincerely invite you to nominate 1st VP, 2nd VP, Treasurer and Secretary for Global PSC 2005-2006. In addition, I would like to encourage you to participate in the standard setting committees. Please contact me directly at okwu@gcsincorp.com. Thank you.

Owen Wu
PSC President
okwu@gcsincorp.com

PSC-EOA June 2004 Seminar

Yalan Mao

Title: Transpacific Business and Career Opportunity
Time: 10:00 am, Saturday, 06/12/04
Location: Stanford University CIS Building (Center for Integrated Systems), # 101 (Cypress auditorium)
Speaker: Samuel T. Wang, Ph.D., President, SMIC (Semiconductor Manufacturing International Corp)
Fee: Member free, \$10 for non-member, \$5 for student

Abstract:

In this presentation, Sam will discuss the trend of high-tech industry, and describe the basics of semiconductor technology and business, as well as give introduction to SMIC's pure play wafer foundry model. Sam will share his own experience accumulated from 20 years on dealing with Asian companies, provide observations of the features of working with Asian firms. He will disclose the challenges he has faced during his career development and conclude his presentation with some advices on preparation required for doing business with other nations.

Speaker Bio:

Sam T. Wang is the President of SMIC Americas, the US operation of Semiconductor Manufacturing International Corporation, located at Fremont, California. SMIC is the most advanced pure play wafer foundry company of China headquartered at Shanghai. SMIC began groundbreaking in August 2000 and now offers leading technology, fast turnaround production on design service, mask making, wafer manufacturing and wafer probe testing. SMIC currently provides wafer fabrication services using 0.35um, 0.25um, 0.18um, 0.15um and 0.13um process technology. SMIC has a global and diversified customer base that includes integrated device manufacturers and fabless semiconductor companies.

Prior to joining SMIC, from 1995 to 2000, Sam was the Vice President of Operation of 8x8 Inc, a fables design company specializing in SOC multimedia chips. From 1984 to 1995, Sam was the cofounder and Executive Vice President of ICT Inc., a semiconductor technology company specializing in developing and marketing EEPROM, EPROM, Flash nonvolatile memories and Programmable Logic Devices (PLD). Before 1984 , Sam was employed by Hughes Aircraft, Intel and National Semiconductor on various EPROM and DRAM projects.

Ph.D. in Electronic Material Department from Princeton University of New Jersey, 1976, and BS Physics from Tsing Hua University of Taiwan, Sam has the background of semiconductor process integration, device physics, multimedia software and hardware integration. He has been the executive and Board Director of ICT, 8x8 Inc., 2netFX and Sunsil Inc.

PSC-EOA July 2004 Seminar

Yalan Mao

Title: Into the 21st Century: Light Emitting Diode advances into Solid State Lighting
Time: 10:00 am, Saturday, 07/10/04
Location: Stanford University CIS Building (Center for Integrated Systems), # 101 (Cypress auditorium)
Speaker: Dr. Jiann G. Yu
Fee: Member free, \$10 for non-member, \$5 for student

Abstract:

Light emitting diode converts electric energy into light. The color of emission depends on the band-gap energy of active layer used in the device. Full color spectra of LED are available now through the proper selection of III-V compound semiconductors. White light LEDs are also practical commercial products now. The most significant implication of new developments is that the energy conversion efficiency of LEDs (new record of 50 Lumens per Watt for white light) is far exceeding 16 Lumens per Watt of the regular household incandescent lamps. The tremendous electrical power saving could contribute not only financial benefits but also could avoid construction of many tens of nuclear power plants. An introduction to the evolution of LED developments in terms of device structures, performance improvements and applications will be presented. A glimpse of the road map of government sponsored solid-state lighting projects will explain the challenges and opportunities ahead the LED industry.

Speaker Bio:

Dr. Jiann G. Yu received his B. S. Degree from Department of Physics, Cheng Kung University, M.S. Degree from Department of Physics, University of Wyoming and PhD from Department of Material Science, UCLA. He started career on Si and GaAs solar cells in Jet Propulsion Laboratory. Then He joined Northrop as a member of staff participating in the investigation of III-V materials that could extend InSb CID array technology. He then joined Tektronix research lab working in GaAs IC development for high-speed application. Since 1981 he joined Optoelectronics Division of Hewlett Packard, working on development and production of various light emitting diodes, including GaP, GaAsP, InGaP, AlGaInP and the recent AlInGaN compound semiconductors. These materials can cover the full color of visible spectrum ranging from blue, cyan, and green, yellow, orange to red. His specialty is epitaxial growth of compound semiconductor layers. He retired from Agilent in 2000 and from Lumileds in 2003.

PSC-EOA August 2004 Seminar

Yalan Mao

Title: 台灣光電科技產業現況與展望
Time: 10:30 am, Saturday, 08/07/04
Location: 5201 Great America Pkwy., Suite 200, Santa Clara, CA 95054
Speaker: Dr. Peter Shih 石大成博士

About the Speaker:

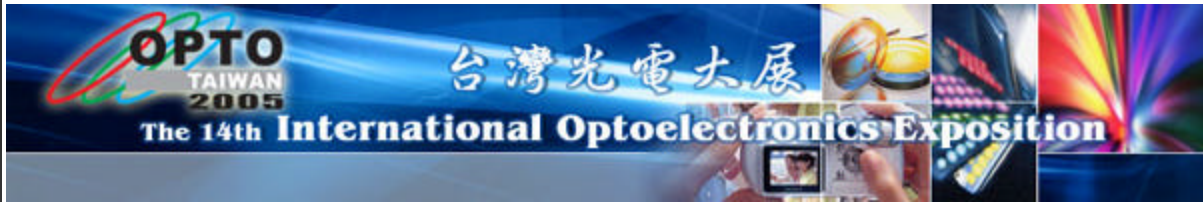
石大成博士 在Rockwellcollins和SRL 工作多年之後於1982年回到台灣，
從1984年起便一直擔任國科會光電小組執行秘書這個職務至今。

石博士曾被總統府資政孫運璿稱為「光電之父」、被經濟日報描述為光電工業「荒蕪至今開花結果」的功臣，更是總統府資政李國鼎立邀返國的人才。除了擔任任國科會光電小組執行秘書之外石博士同時也接掌光電科技工業協進會

OPTO Taiwan / FPD Taiwan / OptoCom Taiwan 2005

Exhibition Date: June 08~11, 2005 Venue: TWTC Exhibition Hall I, Taipei

Website: www.optotaiwan.com



Organizer: Photonics Industry & Technology Development Association (PIDA)

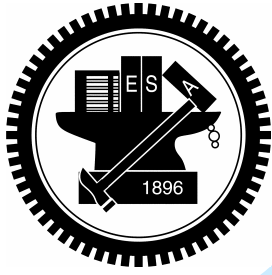
Contact: Ms. Pamela Hsiao Tel: 886-2-23514026 ext. 805 Fax: 886-2-23968513

E-MAIL: pamela@mail.pida.org.tw WEB: www.optotaiwan.com



Organizer:





Faculty Positions

*Department of photonics
Institute of Electro-Optical Engineering
Display Institute
National Chiao Tung University, Hsinchu, Taiwan 300*

Several tenure-track faculty positions are available **immediately** in the **Department of Photonics** of **National Chiao Tung University (NCTU)** for Photonics professionals with proven expertise in the following (but not restricted to) specialties:

- Information display (LCD Physics and Devices, Color Science, etc.)
- Optical and Photonics System: design and fabrication
- Micro-Opto-Electro-Mechanical Devices and Systems (MOEMS)
- Photonic bandgap science and technology, Nanotechnologies in photonics
- Lasers, optical physics, photonic materials & devices
- Fiber optics & communication

The Department of Photonics (PhO) was established in 2004 to be the first undergraduate program dedicated to optics, photonics, and lightwave technologies in Taiwan. **The graduate education arms of the Department of Photonics consist of the Institute of Electro-Optical Engineering (IEO) and the Display Institute (DI)**, conferring graduate degrees in photonics. Currently, there are over 250 graduate students (M.S. and Ph.D.), 20 full-time-equivalent faculty, 2 emeritus professor, and 9 adjunct professors in the **PhO**. **IEO**, founded in August 1980, was the first institute of its kind in Taiwan. The establishment of the Institute was part of the national attempt at promoting research and education in the fields of modern optics. **The Display Institute** is established in 2004 to play a key role in the National display project. Faculties of **PhO** have just successfully completed a four-year academic excellence program entitled Photonics Science and Technology for the Tera-Era, under the sponsorship of the Ministry of Education. This program provides **PhO** with an unprecedented opportunity for its mission of emerging as a world-class photonics center of excellence in photonics in Taiwan. **The Department of Photonics** is committed to excellence in teaching and research programs of high innovation and challenge, and recruitment of the finest faculty and top students.

To apply:

Interested candidates shall send curriculum vitae, statement of research interests and goal, and at least three letters of recommendation to:

Chair, Faculty Search Committee, Department of Photonics

National Chiao Tung University, Hsinchu, Taiwan 30010

Tel: 886-3-5721126 Fax: (+886)-3-5716631

E-mail: ieo@cc.nctu.edu.tw

Website: <http://www.ieo.nctu.edu.tw>

Earlier submission is encouraged. The positions will be reviewed monthly till filled.